REMARKS/ARGUMENTS

Claims 1 through 16, all the claims of the application, remain rejected under 35 USC Section 103(a) as being unpatentable over (i) U.S. Patent No. 6,063,741 to Naitoh et al. (hereinafter the "Naitoh et al. '741 patent"), in combination with either U.S. Patent No. 6,139,022 to Iwashita et al. (hereinafter the "Iwashita et al. '922 patent") or U.S. Patent No. 6,325,385 to Iwashita et al. (hereinafter the "Iwashita et al. '385 patent"). The claims were further rejected under 35 USC Section 103(a) as being unpatentable over U.S. Patent No. 6,444,624 to Walker et al. (hereinafter the "Walker et al. patent") in view of U.S. Patent No. 6,893,720 to Nakahigashi et al. (hereinafter the "Nakahigashi et al. patent"). The Naitoh et al. patent and Walker et al. patent were individually cited as teaching lubricating oil compositions containing, *inter alia*, molybdenum compounds. Each of the Iwashita et al. '922 patent, the Iwashita et al. '385 patent and the Nakahigashi et al. patent was cited for teaching objects, such as engine parts, coated with a diamond-like carbon film. It is alleged that, as the Naitoh et al. patent and Walker et al. patent teach that certain lubricants containing molybdenum compounds provide advantages in "engines", it would obvious to use such compositions to lubricate parts having diamond-like carbon (DLC) coatings because the term "engines" does not exclude engines having DLC coated parts. Applicants respectfully traverse these grounds for rejection.

Applicants filed comments on the above grounds for rejection, and provided certain supporting data in their response dated November 2, 2007, which applicants incorporate into the present response, by reference. Applicants prior comments were interpreted as simply arguing that because molybdenum-based compounds show better friction reducing properties than organic friction modifiers when used in lubricants used to lubricate DLC surfaces, the cited prior art fails to render the presently claimed invention obvious under 35 USC Section 103(a). Applicants submit that their prior comments were misinterpreted and therefore request reconsideration.

Each of the cited primary prior art references (the Naitoh et al. '741 patent and the Walker et al. patent) was cited as teaching lubricating oil compositions for the lubrication of internal combustion engines, which lubricants contained molybdenum compounds. While nothing in these references expressly excludes internal combustion engines containing parts having DLC coated surfaces, and the Iwashita et al '922 patent and the Iwashita et al. '385 patent disclose a piston ring for an internal combustion engine coated with a DLC coated surface, such surfaces were not in common use in internal combustion engines as of the filing date of the

present application. There is nothing in either of the Naitoh et al. '741 patent or the Walker et al. patent that indicates that the lubrication of engine components having DLC coated surfaces was contemplated, and the Iwashita et al '922 patent and the Iwashita et al. '385 patent teach nothing regarding the lubrication of the DLC coated components described therein (the Nakahigashi et al. patent, which is directed only to polymer and rubber articles coated with a DLC surface is considered less relevant than the Iwashita et al '922 patent and the Iwashita et al. '385 patent).

As was previously argued, one skilled in the art would be well aware of the fact that the chemistry of lubricant additives is complex, as is the manner in which different additives interact with each other. This complexity is particularly apparent with surface active additives, such as friction modifiers and antiwear agents, which either adsorb to engine surfaces (as with organic friction modifiers) or decompose to form smooth sacrificial surfaces (as with ZDDP or molybdenum compounds). With such additives, it is also understood that the use of different engine materials can alter the manner in which they function, or the efficacy thereof. Further, where different additives compete for surface area with which to interact, a change in the engine material is expected to have an affect on which type of additive is most effective. The data regarding the efficacy of glycerol monooleate was provided to support the foregoing position and demonstrate that, as would be understood by one skilled in the art, additives that are effective in the lubrication of iron surfaces will not necessarily function effectively in the lubrication of surfaces formed of other materials, specifically, surfaces coated with DLC. As the data demonstrated, glycerol monooleate, which is known to provide excellent friction modifying effectiveness in iron on iron contact (as in engines formed of iron parts) has substantially no effect on DLC on DLC contact. In contrast, as is further demonstrated, molybdenum compounds act as effective friction modifier additives in lubricants used to lubricate DLC coated surfaces.

Therefore, applicants submit that the combination of the Naitoh et al. '741 patent or the Walker et al. patent, which describe lubricants for internal combustion engines and would be construed by those skilled in the art to be applicable to conventional engines in which lubricants are used to lubricate opposing iron surfaces, and the Iwashita et al '922 patent and the Iwashita et al. '385 patent (and the Nakahigashi et al. patent), which teach DLC coated surfaces but nothing regarding the lubrication thereof, would, at best, make it "obvious to try" various additives to determine which may be effective in the lubrication of DLC coated surfaces, which is insufficient to support an obviousness rejection presented under 35 Section 103(a).

Based upon the foregoing, applicants submit that the invention as claimed is distinguishable over the cited combination of prior art references. Applicants therefore respectfully request that all grounds for rejection presented under 35 USC Section 103(a) be withdrawn and the application now be passed to issue.

Respectfully submitted,

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